```
PENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPEN
PENPENPENPENP            ENPENPE          ENPENPE    PENPE   NPENPENPEN
PENPENPENPEN   PENPEN   PENPENP   ENPENPENPENPENP      ENP   ENPENPENPEN
PENPENPENPE   NPENPE   NPENPEN       ENPENPENPEN   P    N   PENPENPENPEN
PENPENPENP          PENPENPE   NPENPENPENPENPE   NPE      NPENPENPENPEN
PENPENPEN   PENPENPENPENPENP   ENPENPENPENPENP   ENPEN    ENPENPENPENPEN
PENPENPE   NPENPENPENPENPEN           PENPEN   PENPEN   PENPENPENPENPEN
PENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPENPEN
```

No. 15 November 1987 Oppenheimer Software

This is the fifteenth edition of the Periodic Electronic Newsletter (PEN) for MCI Mail users assigned to Oppenheimer Software (MCI Mail agency NY4). You may respond to the PEN by typing ANSWER at the COMMAND: line that appears after you read this. This mailbox is toll free - you may write to it as often as you wish, at no charge! (Please note that you may order a toll free mail box - contact Oppenheimer Software for more information.)

CONTENTS

NEED ANOTHER MAILBOX? 2

HOLIDAY GRAPHICS 2

YOUR MCI MAILBOX CAN REACH ANYONE! 3

LINE NOISE AND THE PROBLEMS IT CAUSES 4

LOTUS EXPRESS - NEW PRICE 6

TO EVERY SEASON, TURN, TURN, TURN... 6

FORLORN 4-HOUR 6

CALL WAITING HINTS 6

TELEX DIRECTORY WARNING! 8

TELEX DIRECTORIES 9

TELEX CARRIERS 10

Till Next Time
. 12

>>>>>>>>>>>>>>>>>>>>
NEED ANOTHER MAILBOX?
>>>>>>>>>>>>>>>>>>>>

An undocumented command called CREATE USING NEWUSER is available to allow you to register new mailboxes or accounts on MCI Mail, or provide referral information for others needing information. To use this feature, at the Command: prompt,

(if you are a BASIC user, type)
CREATE USING <RETURN>
NEWUSER <RETURN>

(if you are an ADVANCED user, type)
CREATE USING NEWUSER <RETURN>

Answer all questions, and follow the instructions at the end of the Script. You will be notified as soon as the new mailbox/account is active.

>>>>>>>>>>>>>>>>
HOLIDAY GRAPHICS
>>>>>>>>>>>>>>>>

Advanced Service customers can use a special letterhead with your paper mail. And there's no extra charge!

This special letterhead is called HOLIDAY. During the periods surrounding Valentine's Day, Mother's Day, Father's Day, and the Holiday Season, you may headline your letters with appropriate holiday messages. At other times, the letterhead says "Happy Birthday."

To use the holiday graphic, at the "Handling:" prompt type FORM:HOLIDAY. (Make sure your letter is being delivered on paper.)

Use the following letterhead information to format the text of your holiday letter or when using the READ PAPER command:

No. of characters per line: 80
No. of printed lines: 46

To know which graphic is "ready" for your use, always check the following calendar before sending your letter. ("N/A" means that no holiday graphic is available on those dates.)

1987 HOLIDAY GRAPHICS SCHEDULE

6/23 - 12/3	Happy Birthday
12/4 - 12/5	N/A
12/6 - 1/2/88	Seasons' Greetings

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
YOUR MCI MAILBOX CAN REACH ANYONE!
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Editors Note:
The following is a product announcement from DASnet.

"Wherever you are, whatever system you are connected to,
I can probably get to you by e-mail."

Joel Roth, DASnet(R) Subscriber
Tokyo

YOU CAN SAY THE SAME with your MCI Mail account and a DASnet Subscription. Exchange e-mail with anyone on most major systems. Imagine, sending and receiving mail from your MCI Mail mailbox to/from:

AT&T Mail, DASnet(R) Network, DCMETA, Dialcom(SM), EIES, EasyLink(R), Envoy 100(TM), NWI(R),PeaceNet/EcoNet, Portal Communications(TM), The Source(R), Telemail(R), ATI's Telemail (Japan), Telex, TWICS (Japan),UNISON(R), UUCP, The WELL, Domains e.g. ".COM" and ".EDU".

ADVANTAGES:

* NOTHING NEW TO JOIN OR LEARN. You continue to use MCI Mail. All you need is your DASnet Subscription.

* EXCHANGE E-MAIL with approximately 2.5 MILLION people--even if they have not discovered MCI Mail.

* JUST CHECK YOUR MCI MAILBOX. Your e-mail is delivered to your MCI Mailbox on a regular basis.

To send e-mail through DASnet, send the message to the DASnet account on MCI Mail. You receive e-mail at your mailbox, as you do now. You continue to use MCI Mail. You never need to learn new menus, editors, or commands.

HOW MUCH DOES THE DASnet SERVICE COST?

A Subscription costs only $4.50/month ($5.50/month outside of the U.S.) plus usage. If you correspond with someone who is not a DASnet Subscriber, you also pay to receive e-mail they send you. (Sorry, it costs DASnet so you are billed. This way we can make everyone on all of these systems available to you.)

Examples--Usage Charges for inter-system messages. Sending this a 2 page letter to someone who uses The Source costs 84 cents. Sending it to a Dialcom user in Europe or Asia costs only $1.46. Of course, you also pay MCI Mail the standard fee for sending the article to DASnet.

Invoices are sent by electronic mail; and terms are NET 30.

For more information, you can use MCI Mail to reach DA Systems.
Send mail as follows:

To MCI ID: 304-0160
SUBJECT: [11]mktg!the subject

Address to requests to Anna B. Lange
Marketing Manager
DA Systems, Inc.

>>
LINE NOISE AND THE PROBLEMS IT CAUSES
>>

Editors Note:
The following dissertation is adapted from an article appearing on the MS-DOS Bulletin Board System of Triangle Park, N.C.

Many people ask why there are so many 'garbage' characters on their screens and why file transfers are riddled with errors. These garbage characters are really line noise and can be introduced in many different places. Pure noise is a ASCII 255 (FF in hex), but most line noise is not 'pure'. It usually comes in as something less than ASCII 255, like maybe an ASCII 251 (a character that looks like this '√'). Ever see that one before?

One of the more common and familiar introduction points of line noise is in the telephone company's system and even here there are several ways noise is introduced. A signal is routed through multiple stations before it eventually makes it to the other end. Older areas may have older, less sophisticated equipment that is more apt to be affected by ambient noise. This is one reason some people continue to have noise problems even after hanging up and calling back multiple times.

Also, a given physical connection at one of these junctions may not be up to snuff. If your particular bout of line noise is solved by hanging up and calling back, then it's probable that you were previously connected through an intermittent or 'dirty' connection. Some of these are trunk lines though this is not usually the case.

It is possible that the problem is being caused at the communications PAD, but not if the problem goes away when you call back and the line is clean -or- if you are one of a very few users experiencing noise problems. You may say that you are not having problems with other boards.....in which case the problem is more than likely the route that your call takes to get here. You may be going over micro-wave or through buried cable which for some reason are sub-standard. No matter how many times you call, you will probably be routed over the same path. Micro-wave problems are sometimes the hardest to track down because they can cause intermittent problems. Some interference only occurs during certain times of the day or week.

Another common noise introduction point is in your home. Most residential homes have televisions, radios, microwave ovens, VCR's, and if you are reading this, a micro-computer. All these devices radiate radio waves that can (and often do) get into the phone lines and cause noise. Electric motors and mechanical dimmer controls can introduce noise into the electrical wiring in your house and cause problems. If your line noise problem does not go away after repeated hanging up and calling back, then you may be suffering from one of these household problems. If you are suffering from this problem, you can take steps to eliminate it. First of all, turn off EVERYTHING except the fridge (If it IS the fridge, then you're in trouble. Can't live life with your icebox unplugged) and see if the noise persists. If it goes away, then start turning things back on, checking the computer

each time until you see the noise start up again. It may be that a single device is not bugging you but several devices plotting together to annoy you. This elimination tournament may take awhile.

Another area to check is your wiring at the computer. Use noise supressors on your power connections to both the PC and the modem (if external). Use a shielded RS-232 cable to connect your modem to the PC.

Ribbon cables (especially long runs of it) are great antennas and will cause problems. Re-route the RS-232 cable so it does not run next to the PC power supply or any other transformer. Many 'clone' monitors do not have internal metal shielding and can radiate lots of noise. Make sure the cable does not run near the monitor. If you live near a freeway or highway, then interference from CB radio can present a problem. Many interstate truckers have 100+ watts of power (illegally) on their CB rigs and frequently have sloppy amplifiers that can emit spurious radiation all over the radio spectrum.

And now a little discussion about the modem itself. First of all, lets clarify a commonly misused term - BAUD. The term "Baud" comes from a man's name - J.M.E. Baudot (Pronounced: Baw-doe) a French Telegraphy expert. 1,200 and 2,400 Baud is NOT the same as 1,200 and 2,400 BPS (Bits Per Second).

The usage of "Baud" to describe line speed in terms of data through-put is incorrect. 1,200 and 2,400 BPS modems both operate at 600 Baud. Basically, without getting to technical, a Baud is a "blip" of information. 1,200 BPS modems use four states per blip (or Baud) and 2,400 BPS modems use sixteen states per blip. If you want more information on what Baud and BPS mean and a full explanation of how data is actually represented and transferred by the modem, please refer to PC Magazine Volume 6, Number 9 (May 12, 1987).

Modems operating at 2,400 BPS are much less tolerant of line noise than are modems operating at 1,200 BPS. Conversely, modems capable of 2,400 BPS operate better at 1,200 BPS than do 1,200 BPS only modems. If you are being hopelessly attacked by noise at 2,400 BPS, trying calling back at 1,200 BPS. It's very possible that the noise will be greatly reduced or disappear altogether. I know, you didn't buy a 2,400 BPS modem just to retard it to 1,200 BPS. The brand of the modem plays a part in the immunity to line noise.

Some modems can digest more noise (lower signal-to-noise radio) than others. PC Magazine (same issue mentioned above) ran a test on 87 different modems. You might check the results to see how your modem ranks. Most 2,400 BPS modems operating at 1,200 BPS have approximately -8 to -10 db error threshold while the same modem has about -16 to -20 db threshold operating at 2,400 BPS.

For this reason, line quality is much more critical at 2,400 BPS operation. One person who runs a bulletin board from their office has been plagued with line noise problems at 2,400 BPS but very little noise at 1,200 BPS. The culprit is the office's centralized telephone system.

Many office buildings have a given number of trunks that actually enter the building while there may be many, many more extension within the building. These types of telephone systems have their own controllers and line assignment devices and are frequently not as high in quality as a hard-wired commercial phone line. The acceptable signal-to-noise ratio in some of these inter-office phone controllers are lower than necessary for reliable 2,400 BPS operation but not too low for 1,200 BPS.

If you get transmission errors while downloading or uploading a file, don't fret it. Use of Lotus Express (MS-DOS) or Desktop Express (Macintosh)

(message MCI Mailbox 218-0241 for additional information) incorporates an error checking/correction mechanism that automatically detects and corrects any errors that may occur during transmission.

>>>>>>>>>>>>>>>>>>>>>>>>>
LOTUS EXPRESS - NEW PRICE
>>>>>>>>>>>>>>>>>>>>>>>>>

Lotus Development Corp. has announced a price increase for Lotus Express - from $100.00 to $150.00. We have a limited number of Lotus Express still in stock purchased for sale at the $100.00 price. If you are interested, please message us at 218-0241 or call 212-724-9785 to place an order.

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
TO EVERY SEASON, TURN, TURN, TURN...
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

If people ask when you get to work in the morning, it may be because your 9:00 AM ("first thing in the morning message") MCI Mail message was time stamped 10:00 AM. No, there is nothing wrong with the clocks at MCI... rather, you need to adjust your time zone from EDT to EST (or what ever is proper for your time zone).

To make the change (Lotus/Desktop Express users must be in terminal mode), follow this dialogue:

Command: ACCOUNT <RETURN>

Do you wish to see your current ACCOUNT settings? NO <RETURN>
ACCOUNT setting you wish to change: TIME <RETURN>
Please enter your time zone: EST (or your local time zone) <RETURN>
ACCOUNT setting you wish to change: <RETURN>
Are settings PERManent or TEMPorary: PERM <RETURN>
New ACCOUNT settings are now in effect.

Command:

>>>>>>>>>>>>>>>
FORLORN 4-HOUR
>>>>>>>>>>>>>>>

Effective January 1, 1988, two of MCI MAIL's paper delivery options, 4Hour Letter and Weekend Special Service, will be discontinued.

Although MCI would prefer to continue all the present delivery options to its MCI Mail customers, it was not economically feasible for MCI to do so. The standard MCI Letter (1-2 day delivery), the ONITE Letter (Overnight deliver), the International Courier Letter (usually 50% less than traditional services!) and the International Letter. will continue to provide expanded coverage for your paper mail delivery needs.

>>>>>>>>>>>>>>>>>>
CALL WAITING HINTS
>>>>>>>>>>>>>>>>>>

Editors note:
The following information comes from an unnamed source at an Eastern Phone Company.

If you have the call waiting feature on your telephone line would like to disable it during any voice or data transfers when you use your modem, follow this procedure:

VOICE CALLS: DIAL *70 (wait 2 seconds for tone) XXX-XXXX

MODEM CALLS:

-TONE==> 'ATDT *70, XXX-XXXX'

-PULSE=> 'ATDP 1170, XXX-XXXX'

The call waiting feature is automatically reset as soon as you terminate the connection (hang up).

>>>>>>>>>>>>>>>>>>>>>>>
TELEX DIRECTORY WARNING!
>>>>>>>>>>>>>>>>>>>>>>>

Editors note:
The following telex related information has been culled from the HELP messages available from MCI Mail.

You can have your organization listed in the telex directories free of charge.

For a list of the directories, type HELP TELEX DIRECTORY on-line. To request a listing in the next printing, send a message:

TO: Telex Directory
287-1091 Telex Directory

BE AWARE: Some publishers print telex directories that include unsolicited listings. A notice that resembles an invoice is then sent to the customer, requesting payment for the listing. DO NOT PAY FOR ANY TELEX LISTING THAT YOU DID NOT REQUEST. If you receive an "invoice," such as this, check with the billing agency to verify the charges.

MCI Mail and MCI International (Western Union International) have no association with these publishers. Any telex listing that you requested through MCI is free unless you asked for special printing such as boldfacing or oversized type.

>>>>>>>>>>>>>>>>>
TELEX DIRECTORIES
>>>>>>>>>>>>>>>>>

Listed below are the major telex directories and how you may obtain them (prices subject to change).

U.S. DIRECTORY FOR TELECOMMUNICATIONS SUBSCRIBERS
Contact: U.S. Directory for Telecommunications Subscribers
- P.O. Box 431
- Wall Street Station
- New York, NY 10268
Cost: $11.50

JAEGER & WALDMANN
Contact: Universal Media
- P.O. Box 45
- Bethpage, NY 11714
Telephone: (516) 433-6767
Cost: Vol. 1 & 2 (Europe) - $40 plus $8 shipping
- Vol. 3 & 4 (U.S. and Far East) - $40 plus $8 shipping
- Vol. 5 & 6 (Classified) - $40 plus $8 shipping
- Vol. 7 & 8 (Answerback codes) - $40 plus $8 shipping
- All Volumes - $125 plus $24 shipping

THE GREEN INTERNATIONAL DIRECTORIES
Contact: Teleprint International (Customer Service Office)
- P.O. Box 3796
- Chico, CA 95927
Telephone: (916) 342-5458
Cost: The Green African Telex Directory - $26
- The Green American Telex Directory - $44
- The Green Asian/Australian Directory - $38
- The Green European Directory - $66
- The Worldwide Set - $160

NOTE: You will be charged an additional 40% import and sales tax
- plus shipping expenses.

>>>>>>>>>>>>>>
TELEX CARRIERS
>>>>>>>>>>>>>>

MCI Mail delivers messages to all telex destinations. There are several telex networks that provide domestic service.

When sending a domestic telex, you must specify the network that services your recipient by selecting the appropriate MCI Mail option (1, 2 or 3).

Because networks may use identical telex numbers, the answerback can often be the key to identifying the carrier. (This is also why using the answerback is important for proper delivery.)

Use the following descriptions to identify your recipient's carrier:

NO	CODE	COUNTRY NAME
1	-	MCI/WUI (OR OTHER IRC TELEX NETWORK)
2	0	WESTERN UNION TELEX I NETWORK
3	5	WESTERN UNION TELEX II (TWX) NETWORK

>>>>>>>>>>>>>>>>> 1 MCI/WUI (OR OTHER IRC TELEX NETWORK)

CODE : Blank

These numbers are 5-8 digits long. Both the number and the answerback usually begin with a digit, and the answerback ends with a network identifier as follows:

CARRIER	1st DIGIT	IDENTIFIER
MCI/WUI	6	UW
RCA	2	UR
ITT	4	UI
TRT	1	UT
FTC	8	
Graphnet	3	

Note: Western Union Telex I numbers also begin with these same digits; therefore, the answerback is important in helping you make the right selection.

Western Union Telex I answerbacks are all alpha characters.

>>>>>>>>>>>>>>>>>> 2 WESTERN UNION TELEX I NETWORK
(Including EasyLink)

Code: 1-

These numbers are usually 6 digits long. The answerback consists of all alpha characters, and often ends with a city code. For example, SEA (Seattle), SDG (San Diego), or NYK (New York). Sometimes the last two characters are the network identifier, UD.

EasyLink telex numbers are eight digits long and begin with the digits 62. The answerback consists of the telex number and ESL UD.

>>>>>>>>>>>>>>>>>>>> 3 WESTERN UNION TELEX II (TWX)
(Including EasyLink TWX)

CODE: 5-

These numbers are 10 digits long. They begin with 510, 710, 810, 910. The answerback usually consists of all alpha characters.

Selecting the incorrect domestic telex carrier will result in the cancellation of your telex message.

>>>>>>>>>>>>>>>>>> SENDING TELEX MESSAGES

You will receive notification automatically in your mailbox free of charge once your message has been delivered.

Telex messages should contain no more than 69 characters per line, and no more than 12,000 characters per message. Answerbacks may not exceed 15 characters.

To send a message to a telex terminal:

1. At TO or CC, type the recipient's name and the word TELEX in parentheses. For example:

```
====================================
 TO:  Peter Beal (TELEX)
====================================
```

Address entries may be cancelled or aborted by typing a slash (/) at any address prompt.

2. At Country,

For destinations inside the continental U.S., press <RETURN>. When the list appears, select the carrier using the item number.

For international destinations or U.S. locations outside the continental U.S. (ie, Alaska, Guam), type the country name or telex country code. If a list of countries appears, make your selection by typing the item number. For example:

```
====================================
 Enter country name or country code of recipient. Press <RETURN> if
 continental United States.

 Country: France
 Destination is FRANCE/MONACO (842).
====================================
```

3. At Telex No, type the telex number. Notice that the appropriate country code is displayed. Do not retype it. Simply enter your recipient's telex number. Do not use spaces, letters, punctuation or symbols in the telex number. Do not include the answerback, (it will be the next prompt). For example:

```
====================================
 Telex No: 842-

 Telex No:  842-668478
====================================
```

4. At Answerback type the recipient's answerback. Using an answerback ensures that your message is delivered to the correct telex terminal and may speed delivery. If you do not know the recipient's answerback, you may press <RETURN>.

Do not guess the answerback. An incorrect answerback will result in cancellation of your message.

5. At Is this address correct? type either YES or NO. Notice that MCI Mail displays the telex number and answerback on one line.

If it is correct, type YES to complete addressing. TO will appear for the next addressee.

If it is not correct, type NO. This entry will be deleted and you may reenter it correctly. For example:

```
====================================
 TO:  Peter Beal
 TLX: 842668478 668478HTC CH

 Is this address correct:  (Yes or No)?  Y
====================================
```

6. At the next TO, continue adding addressees or press <RETURN> to complete the addressing and send your message as usual.

```
>>>>>>>>>>>>>>
Till Next Time
>>>>>>>>>>>>>>
Gary.......
MCI Mail Agency NY4
MCI ID# 218-0241
Telex: 6502180241
Tel No. 212-787-2416
```